

TROPICAL DEPRESSION 15W

Tropical Depression (TD) 15W originated in the subtropics at a time when the monsoon trough was displaced far to the north of normal (see Figure 3-13-4 in Kirk's summary for a graphic depiction of this unusual low-level flow pattern). TD 15W had an unusual structure comprised of an extensive region of low-level cloud lines surrounding a small area of deep convection (Figure 3-15-1a). First identified on the 100600Z August Significant Tropical Weather Advisory, the system drifted slowly northward and became better organized. Based on satellite intensity estimates of 25 kt (13 m/sec), the first warning was issued, valid at 120600Z. Moving generally toward the east-northeast, the system maintained its unusual cloud pattern. The peak intensity of 30 kt (15 m/sec) — as estimated from satellite imagery, and confirmed by a scatterometer pass (Figure 3-15-1b) — was maintained for several days. When the system lost its deep convection, and the extent and organization of the low-level cloud lines decreased, the final warning was issued valid at 160600Z.

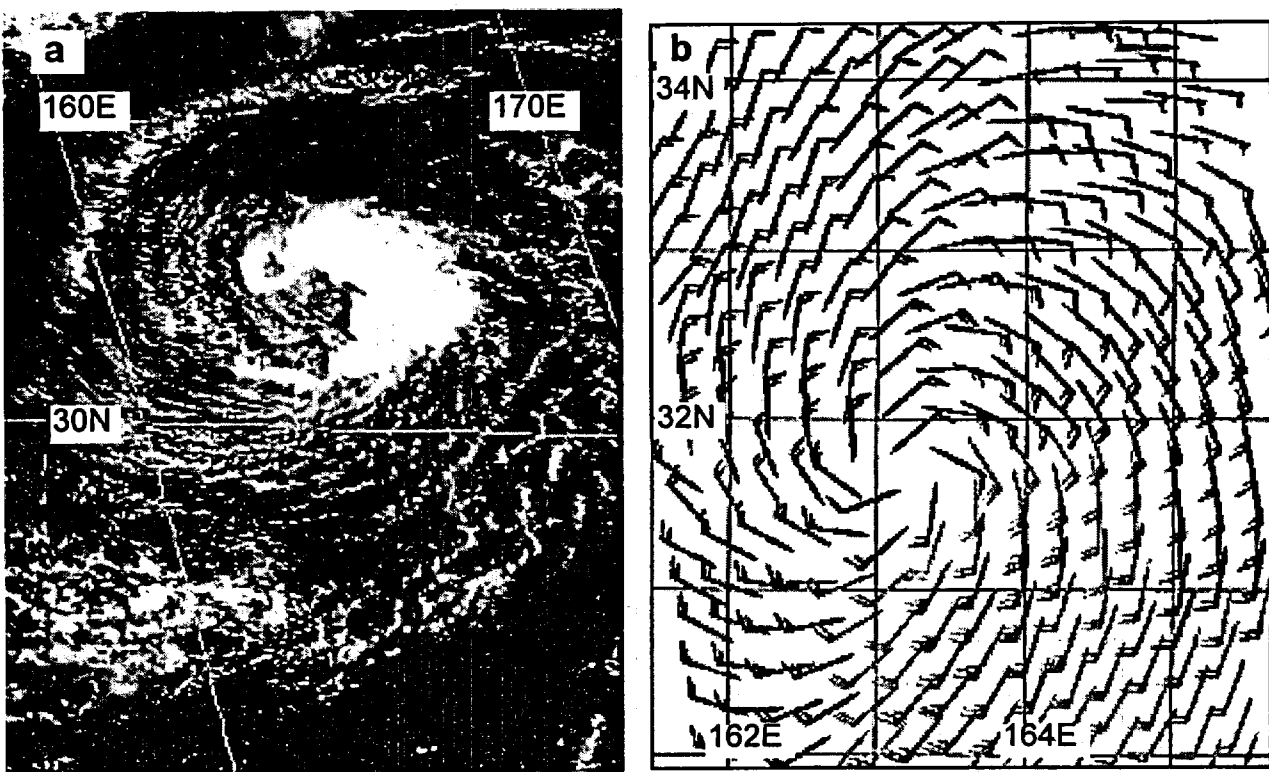


Figure 3-15-1 (a) Well-defined low-level cloud lines coil tightly around a poorly organized area of deep convection (132331Z August visible GMS imagery). (b) A region of 25- to 30-kt (13- to 15-m/sec) winds was detected by scatterometry in the southeastern quadrant of TD 15W (141132Z August ERS-2 scatterometer-derived marine surface winds).